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## CLAIMS

What is claimed is:

1. A computer implemented method of transmitting a data set between an electronic funds transaction point of sale (EFTPOS) terminal arrangement and a data processing system (DPS) hosting a first application, the EFTPOS terminal arrangement coupled to a financial institution DPS hosting a second application, wherein the EFTPOS terminal arrangement hosts one or more payment applications and one or more non-payment applications, the method comprising:
  - 5 assigning an EFTPOS address to an EFTPOS terminal via the non-payment application of the EFTPOS terminal arrangement;
  - 10 receiving from the external DPS a first data set with an address identifier, the first data set being directed to an EFTPOS terminal using the address identifier;
  - converting the address identifier to the EFTPOS address assigned to the EFTPOS terminal via the non-payment application of the EFTPOS terminal arrangement in response to receiving the first data set from the external DPS; and
  - 15 transmitting the first data set to the EFTPOS terminal via the EFTPOS terminal arrangement using the assigned EFTPOS address.
2. The method of claim 1, wherein the step of receiving from the external DPS a first data set includes the step of encoding the address identifier to further include a DPS address identifier for the external DPS, wherein the DPS address identifier is used for transmitting the data set from the EFTPOS terminal to the external DPS.
- 20 3. The method of claim 2, further comprising the steps of:
  - 25 transmitting a second data set from the EFTPOS terminal via non-payment application of the EFTPOS terminal arrangement to the external DPS in response to receipt of the first data set; and
  - converting the EFTPOS address to the address identifier via the non-payment application of the EFTPOS terminal arrangement and transmitting the second data set to the external DPS.
- 30 4. The method of claim 1, further comprising the steps of:

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selecting a product via the non-payment application and offered by the first application on the external DPS after receiving the first data set;

transmitting a set of customer-specific financial account data from the EFTPOS terminal via the payment application of the EFTPOS terminal arrangement to the second application on the financial institution DPS for processing payment for a product; and

receiving via the EFTPOS terminal arrangement a transaction confirmation from the second application on the financial institution DPS in response to receipt of the financial account data transmission at the second application.

5. A system for transmitting a data set between an electronic funds transaction point of sale (EFTPOS) terminal arrangement of an EFTPOS system and an external DPS hosting a first application, the EFTPOS terminal coupled to a financial institution DPS hosting a second application, wherein the EFTPOS terminal arrangement hosts one or more payment applications and one or more non-payment applications, the system comprising:

means for using a first database of EFTPOS addresses of the EFTPOS terminal arrangement to assign an EFTPOS address to an EFTPOS terminal;

means for receiving from the external DPS a first data set with an address identifier, the first data set being directed to an EFTPOS terminal using the address identifier;

means for converting the address identifier to the EFTPOS address assigned to the EFTPOS terminal using the first database of the EFTPOS terminal arrangement in response to receiving the first data set from the external DPS; and

means for transmitting the first data set to the EFTPOS terminal via the EFTPOS terminal arrangement using the assigned EFTPOS address.

6. The system of claim 5, further comprising:

transmitting a second data set from the EFTPOS terminal via the EFTPOS terminal arrangement to the external DPS in response to receipt of the first data set; and

converting the EFTPOS address to the address identifier using the first database of the EFTPOS terminal arrangement and transmitting the second data set to the external DPS.

7. An electronic funds transaction point of sale (EFTPOS) arrangement configured and arranged for communication via a first secure channel with a financial application hosted by a data processing system of a financial institution and communication via a second non-

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secure channel with a vendor application hosted by a data processing system of a vendor, the EFTPOS arrangement coupled to a plurality of EFTPOS terminals, the arrangement comprising:

5 a proxy server configured and arranged to be coupled to the plurality of EFTPOS terminals and to receive sets of data from the vendor application via the non-secure channel and transmit the data sets to selected ones of the EFTPOS terminals, and configured to receive payment requests from the EFTPOS terminals and transmit the payment requests to the financial application via the secure channel.

10 8. The arrangement of claim 7, wherein the proxy server is configured to assign each of the plurality of EFTPOS terminals a respective EFTPOS address, and the proxy server is further configured to associate the EFTPOS addresses with respective addresses that are addressable via the non-secure channel and translate addresses in the sets of data from the vendor application to EFTPOS addresses.

15 9. The arrangement of claim 8, wherein the proxy server is further configured to translate an address from the EFTPOS address to a vendor application address and configured to transmit sets of data from the EFTPOS terminals via the non-secure channel to the vendor application.

20 10. The arrangement of claim 8, wherein the proxy server further comprises an interface module configured and arranged to transmit data sets to selected ones of the EFTPOS terminals and configured and arranged to facilitate wireless communication between a mobile communications device and the proxy server.

25 11. An electronic funds transaction point of sale (EFTPOS) system arranged for communication via a first secure channel with a financial application hosted by a data processing system (DPS) of a financial institution and communication via a second non-secure channel with a vendor application hosted by a data processing system (DPS) of a vendor, the system comprising:

30 a plurality of EFTPOS terminals; and  
a proxy server coupled to the plurality of EFTPOS terminals, the proxy server configured to receive sets of data from the vendor application via the non-secure channel

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and transmit the data sets to selected ones of the EFTPOS terminals, and configured to receive payment requests from the EFTPOS terminals and transmit the payment requests to the financial application via the secure channel.

- 5     12.     The system of claim 11, wherein each of the plurality of EFTPOS terminals are assigned respective EFTPOS addresses, and the proxy server is further configured to associate the EFTPOS addresses with respective addresses that are addressable via the non-secure channel and translate addresses in the sets of data from the vendor application to EFTPOS addresses.

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13.     The system of claim 12, wherein the proxy server is further configured to translate an address from the EFTPOS address to a vendor application address and configured to transmit sets of data from the EFTPOS terminals via the non-secure channel to the vendor application.

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14.     The system of claim 11, wherein the proxy server is further configured to transmit and receive sets of data between selected ones of the EFTPOS terminals and a non-vendor application via a non-secure channel.

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15.     The system of claim 10, wherein the proxy server further comprises an interface module configured and arranged to transmit data sets to selected ones of the EFTPOS terminals.

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16.     The system of claim 15, wherein the proxy server is configured and arranged to facilitate wireless communication between a mobile communications device and the EFTPOS system via the interface module.

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17.     The system of claim 11, wherein at least one of the plurality of terminals further comprises an interface module that is configured and arranged to facilitate wireless communications between a mobile communications device and the proxy server.

18.     The system of claim 11, wherein the proxy server is configured and arranged to host one or more payment applications for accessing the financial application of the DPS of the

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financial institution via the first secure channel, the proxy server is further configured to host one or more non-payment applications for accessing the vendor application of the DPS of the vendor, wherein the payment and non-payment applications of the proxy server are reconfigurable to change the transmission and reception of data sets within the EFTPOS system.

19. An electronic funds transaction point of sale (EFTPOS) system arranged for communication via a first secure channel with a financial application hosted by a data processing system (DPS) of a financial institution, the system arranged for communication via a second non-secure channel with a vendor application hosted by a data processing system (DPS) of a vendor and a e-service application hosted by a data processing system (DPS) of an e-service provider, wherein the e-service provider provides services over a public communications network, the system comprising:

a plurality of EFTPOS terminals adapted to process a data set received from the vendor application and from the e-service application via the second non-secure channel; and

a server arrangement coupled to the plurality of EFTPOS terminals and configured to receive sets of data from the vendor application via the non-secure channel and transmit the data sets to selected ones of the EFTPOS terminals using an address identifier, the server arrangement configured and arranged to assign a different address identifier to each of the respective EFTPOS addresses of the plurality of EFTPOS terminals and configured to convert the address identifier to one of the assigned EFTPOS addresses and to send the data set to the EFTPOS terminal having the assigned EFTPOS address, the server further configured to receive payment requests from the EFTPOS terminals and transmit the payment requests to the financial application via the secure channel.

20. The system of claim 19, wherein the server is further configured to translate an address from the EFTPOS address to a vendor application address and configured to transmit sets of data from the EFTPOS terminals via the non-secure channel to the vendor application.